352 and touch screen 354 as well as an opening 366 so that the display screen can be seen through the housing 364. In one embodiment, as shown in FIG. 18, the housing 364 includes a facade 370 for covering the sides the LCD display 352 and touch screen 354. Although not shown in great detail, the facade 370 is positioned around the entire perimeter of the LCD display 352 and touch screen 354. The facade 370 serves to hide the interconnects leaving only the active area of the LCD display 352 and touch screen 354 in view.

[0113] In another embodiment, as shown in FIG. 19, the housing 364 does not include a facade 370, but rather a mask 372 that is printed on interior portion of the top glass 374 of the touch screen 354 that extends between the sides of the housing 364. This particular arrangement makes the mask 372 look submerged in the top glass 356. The mask 372 serves the same function as the facade 370, but is a more elegant solution. In one implementation, the mask 372 is a formed from high temperature black polymer. In the illustrated embodiment of FIG. 19, the touch screen 354 is based on mutual capacitance sensing and thus the sensing layer 358 includes driving lines 376 and sensing lines 378. The driving lines 376 are disposed on the top glass 356 and the mask 372, and the sensing lines 378 are disposed on the bottom glass 360. The driving lines and sensing lines 376 and 378 are insulated from one another via a spacer 380. The spacer 380 may for example be a clear piece of plastic with optical matching materials retained therein or applied thereto.

[0114] In one embodiment and referring to both FIGS. 18 and 19, the electronic device 350 corresponds to a tablet computer. In this embodiment, the housing 364 also encloses various integrated circuit chips and other circuitry 382 that provide computing operations for the tablet computer. By way of example, the integrated circuit chips and other circuitry may include a microprocessor, motherboard, Read-Only Memory (ROM), Random-Access Memory (RAM), a hard drive, a disk drive, a battery, and various input/output support devices.

[0115] While this invention has been described in terms of several preferred embodiments, there are alterations, permutations, and equivalents, which fall within the scope of this invention. For example, although the touch screen was primarily directed at capacitive sensing, it should be noted that some or all of the features described herein may be applied to other sensing methodologies. It should also be noted that there are many alternative ways of implementing the methods and apparatuses of the present invention. It is therefore intended that the following appended claims be interpreted as including all such alterations, permutations, and equivalents as fall within the true spirit and scope of the present invention.

What is claimed is:

1. A touch panel having a transparent capacitive sensing medium configured to detect multiple touches or near touches that occur at the same time and at distinct locations in the plane of the touch panel and to produce distinct signals representative of the location of the touches on the plane of the touch panel for each of the multiple touches.

2. The touch panel as recited in claim 1 wherein the transparent sensing medium includes a pixilated array of transparent capacitance sensing nodes.

3. The touch panel as recited in claim 1 wherein the transparent capacitive sensing medium comprises:

a transparent electrode layer, the electrode layer including a plurality of electrically isolated electrodes and electrode traces formed from a transparent conductive material, each of the electrodes being placed at different locations in the plane of the touch panel, each of the electrodes having an individual trace for operatively coupling to capacitive monitoring circuitry.

4. The touch panel as recited in claim 3 further including one or more integrated circuits for monitoring the capacitance at each of the electrodes, the integrated circuits being operatively coupled to the electrodes via the traces.

5. The touch panel as recited in claim 3 wherein the electrodes are placed in rows and columns.

6. The touch panel as recited in claim 3 wherein the electrodes and traces are formed from indium tin oxide (ITO).

7. The touch panel as recited in claim 1 wherein the transparent capacitive sensing medium comprises:

a first layer having a plurality of transparent conductive lines that are electrically isolated from one another; and

a second layer spatially separated from the first layer and having a plurality of transparent conductive lines that are electrically isolated from one another, the second conductive lines being positioned transverse to the first conductive lines, the intersection of transverse lines being positioned at different locations in the plane of the touch panel, each of the conductive lines being operatively coupled to capacitive monitoring circuitry.

8. The touch panel as recited in claim 7 wherein the conductive lines on each of the layers are substantially parallel to one another.

9. The touch panel as recited in claim 8 wherein the conductive lines on different layers are substantially perpendicular to one another.

10. The touch panel as recited in claim 7 wherein the transparent conductive lines of the first layer are disposed on a first glass member, and wherein the transparent conductive lines of the second layer are disposed on a second glass member, the first glass member being disposed over the second glass member.

11. The touch panel as recited in claim 10 further including a third glass member disposed over the first glass member, the first and second glass members being attached to one another via an adhesive layer, the third glass member being attached to the first glass member via another adhesive layer.

12. The touch panel as recited in claim 7 wherein the conductive lines are formed from indium tin oxide (ITO).

13. A display arrangement comprising:

a display having a screen for displaying a graphical user interface;

a transparent touch panel allowing the screen to be viewed therethrough and capable of recognizing multiple touch events that occur at different locations on the touch sensitive surface of the touch screen at the same time and to output this information to a host device.

14. The display arrangement as recited in claim 13 wherein the touch screen includes a multipoint sensing arrangement configured to simultaneously detect and moni-